

Supplementary Tab 1A. Analysis of heavy metals in industrial wastewater. These compounds were determined during a joint project between Qatar University and Exxonmobil company (2012-2014).

Element	Concentration $\pm$ S.D.	Element	Concentration $\pm$ S.D.
Essential elements		Non-essential elements	
K	20.97 $\pm$ 1.52	As	00.00 $\pm$ 00.00
Mg	11.98 $\pm$ 0.60	Ba	36.36 $\pm$ 3.41
P	0.123 $\pm$ 6.43	Cd	0.65 $\pm$ 0.04
Co	0.51 $\pm$ 0.07	Cr	8.51 $\pm$ 4.00
Cu	119.80 $\pm$ 13.25	Hg	No data
Fe	3937.0 $\pm$ 247.6	Li	448.83 $\pm$ 31.08
Mn	158.73 $\pm$ 9.25	Pb	00.00 $\pm$ 00.00
Mo	1.86 $\pm$ 0.32	Se	No data
Na	263400.0 $\pm$ 17367.5	V	00.00 $\pm$ 00.00
Ni	2.32 $\pm$ 0.11	Note: Some important heavy metals such as Hg and Se that normally found in oil and gas components were not measured.	
Zn	2898.33 $\pm$ 177.16		

Four replicates for each treatment, K, P, and Mg (PPM), all the remaining elements PPB. More data can be obtained from Exxonmobil company, Research Qatar Limited.

Supplementary Table 1B. Analysis of heavy metals in wastewater of anthropogenic origin in a untreated pond near Doha, the capital of Qatar. These data are among the report of Sweileh (2002) [see reference [21] These figures might change depending on the source and time.

Trace element	Range of concentrations over one year (µg/L),
Cr	1.55-7.62
Cu	Trace -10.90
Mn	32.2-169.0
Ni	No detected-2.02
Pb	No detected-6.67